Working together to close the Louisiana Flood Protection Gap

Turning risk into an opportunity

The insurance industry has an opportunity to capitalize on a growing risk pool with more confidence than ever before.

USD billion

Premium amount Louisiana households are underinsured by in an average year.

> Percentage of Louisiana homeowners who do not have a flood policy.

65%

Swiss Re

What is driving insurer confidence?





Three key elements



High resolution maps



FEMA



Swiss Re Inland Flood



High resolution maps



FEMA



Swiss Re Pluvial Flood



🗊 Swiss Re

High resolution maps



FEMA



Swiss Re Storm Surge



High resolution maps



FEMA



Swiss Re Combined



Four-box modeling approach



Fully probabilistic inland and storm surge models



US storm surge modeling



Fully probabilistic inland and storm surge models



Inland flood modeling



Fully probabilistic inland and storm surge models



How do companies evaluate entering the flood market?



Evaluating options



Take Up Rate



LA private flood market potential

- Potential LA private flood market direct written premium: \$2.4 billion
 - Assumes 25% Loss Ratio, and 100% flood-insurance take-up
 - Not everyone will buy, and some will buy cheaper premiums if multiple options are presented (including NFIP)
 - Similar to HO market, \$2.1 billion. No other state has flood market potential this large relative to its HO market.
 - NFIP premium ~\$295 million (effective policies in 2021)



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Not all X zones are created equally

Take-up rate of NFIP policies in Non-SFHA census tracts



- Louisiana has a high rate of voluntary flood insurance purchase in more areas than other states.
- Statewide, less than 20% of single-family homes purchase an NFIP policy in Louisiana.

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Take up rate modeling case study

- Developed model primarily with NFIP data supplemented with carrier data.
- Lift chart is predicting private flood bind rates.
- Lowest quantile expected premium per quote = \$33.
- Highest quantile expected premium per quote = \$852.



Take up rate drivers differ coastal/non-coastal

- Coastal Non-SFHA
 - Geography elevation, distance to coast
 - Financial means median income of area, percent of home ownership
- Non-Coastal Non-SFHA
 - Previous events paid losses, occurrences
 - Risk
 - Geography distance to river, relative elevation





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The model provides location estimates of take-up rate

Aggregated NFIP take-up rates



Predicted private carrier take-up rates

The model is a tool to increase take-up.

- Successful flood program needs accurate rates AND customers.
- Use cases of take-up rate modeling:
 - Market potential
 - Product viability / testing and pro forma development
 - Deploying marketing resources
 - Customer Targeting
- Louisiana recently passed a law that decreases the hurdles for admitted market private flood. Act 77, effective January 1, 2022.



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Any questions?

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